

REMARKS

This Amendment is in response to the Office Action dated March 7, 2008, in which claims 1-19 were initially rejected. Applicant respectfully requests reconsideration and allowance of all pending claims in view of the above-amendments and the following remarks.

I. DRAWINGS

The drawings were objected as allegedly not disclosing the features of claim 13, specifically, “at least one parasitic wire and one radiating wire adjacent to said radiating wire with which said parasitic wire is associated cross over one another.”

Figure 7b and the written description on page 17, lines 1-12 clearly support the elements of original claim 13. In particular, the cross-over is shown by reference letter/arrow "E" between radiating wire 711 and parasitic wire 741.

Therefore, Applicant respectfully requests that the objection to the drawings be withdrawn.

II. CLAIM REJECTIONS UNDER U.S.C. §112

Claims 10-11 were rejected under U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

In line with the Examiner's assumption, claims 10 and 11 have been amended so that the current wording is “one end of each of said parasitic wires is connected ... to one of the ends of said radiating wire ...”

The basis for these amendments can be found in p. 16 l. 10-21 and p. 19 l. 4-5 of the written description.

Therefore, Applicant respectfully requests that claim rejection under §112 be withdrawn.

III. CLAIM REJECTIONS UNDER U.S.C. §102(b) and §103(a)

Claims 1-4,6-17 and 19 are rejected under U.S.C. §102(b) as being anticipated by Fillipovic, U.S. Patent No. 6,278,414.

Claim 5 is rejected under U.S.C. §103(a) as being unpatentable over Fillipovic, U.S. Patent No. 6,278,414.

Applicant considers that new claim 1 is new and non-obvious in view of Fillipovic.

A. Fillipovic

Fillipovic discloses a bent-segment helical antenna. In particular, Fillipovic describes a helical antenna comprising one or more radiating wires (see abstract, figures 1 and 2, column 2 lines 16-19). Each radiating wire comprises a plurality of segments. A first segment is connected at one end to a feed network and at the other end to a second segment via a third segment. The second segment is adjacent to and offset from the first segment.

The unique aim of the arrangement disclosed in Fillipovic is to provide a helical antenna of reduced size (column 2 lines 34-37).

B. Present Application

An embodiment of the present application has a different aim, which is to broaden the bandwidth of the antenna by associating at least one radiating wire to a parasitic wire (claim 1, page 5 lines 15-22).

C. Fillipovic Fails to Disclose the Claimed Invention

Fillipovic does not disclose or suggests that the width of the parasitic wire must be strictly narrower than the width of the radiating wire, in order to optimize the bandwidth of the antenna.

Also, Fillipovic does not disclose or suggest either that each of said parasitic wires is farther in a direction perpendicular to the axis of said wires from said associated radiating wire than from at least one of said other radiating wires, in order to increase the bandwidth of the antenna.

As mentioned above, the unique goal of Fillipovic is to reduce the size of the antenna but not to increase its bandwidth. The embodiment of Fillipovic described in relation to figure 11A somehow increases the bandwidth of the antenna, but this increase is somehow limited and narrow due to the positioning of the feeding means 730.

Thus, Fillipovic does not disclose all of the features of new claim 1, in particular that “the width of the parasitic wire must be strictly narrower than the width of the radiating wire” and that “each of said parasitic wires is farther in a direction perpendicular to the axis of said wires from said associated radiating wire than from at least one of said other radiating wires”, the aims of the embodiments described in Fillipovic being totally different from the ones of the Applicant’s invention.

New claim 1 is thus new and not obvious in view of Fillipovic.

D. Louvigne

Claim 18 was rejected under U.S.C. §103(a) as being unpatentable over Fillipovic in view of Louvigne.

Louvigne is not relevant to new claim 1 since it does not disclose or suggest the use of parasitic wires associated to radiating wires in an antenna.

Also, the combination of Fillipovic and Louvigne is not relevant to new claim 1 since neither of these documents discloses that “the width of the parasitic wire must be strictly narrower than the width of the radiating wire” and that “each of said parasitic wires is farther in a direction perpendicular to the axis of said wires from said associated radiating wire than from at least one of said other radiating wires”.

In view of the above, all claims are believed to be in condition for allowance.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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